



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,358	04/06/2005	Takenobu Sunagawa	Q86665	7769

23373 7590 04/19/2006

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

BERNSHTEYN, MICHAEL

ART UNIT	PAPER NUMBER
----------	--------------

1713

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/530,358

Applicant(s)

SUNAGAWA ET AL.

Examiner

Michael Bernshteyn

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. This Office Action is in response to the Amend filed on January 30, 2006.

Claim 1 has been amended; claim 5 has been added. In view of the Amendment, claim rejections under 35 USC § 102 is withdrawn.

2. Claims 1-5 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Ueno et al. (US Patent Application Publication 2002/0022695).

Ueno discloses a polymerizable unsaturated polyester resin composition, wherein a polyester skeleton derived from collected PET is introduced, for effective utilization of waste PET such as a PET bottle, which has recently been considered a large obstacle to environmental protection. The polymerizable unsaturated polyester resin composition comprises a straight-chain polyester (A) having a (meth)acryloyl group at both ends of molecules and an ethylenically unsaturated monomer (B), said straight-chain polyester (A) having a (meth)acryloyl group at both ends of molecules

Art Unit: 1713

being obtained by reacting: (a) a terephthalate oligomer having a hydroxyl group at both ends of molecules resulted from the alcoholysis reaction of collected waste polyethylene terephthalate by an aliphatic glycol having an ether bond, (b) a dibasic acid containing an aromatic dibasic acid as a principal component, and (c) a glycidyl meth)acrylate (abstract).

With regard to the limitations of claims 1 and 5, Ueno discloses in Synthesis Example 1 that the reaction continued at the same temperature for 6.5 hours, and 0.514 g of toluhydroquinone was added when a 70% **styrene** (which is readable as component (c) in instant claim 1) solution exhibited an acid value of 23.5 and a Gardner viscosity of U-V', and after cooling to 130°C, 379.7 g (2.67 mol) of **glycidyl methacrylate** (which is readable as component (a) in instant claim 1) was charged in an atmosphere of nitrogen/air=1:1. The reaction continued at 130°C for two hours, and after cooling to 90°C when the solid acid value of a 75% **methyl methacrylate** solution reached 2.0, 1568.4 g of **MMA** (which is readable as component (b) in instant claim 1), 0.087 g of 5% copper naphthenate and 0.291 g of t-butyl catechol were added to obtain a liquid resin having a non-volatile content of 75% (page 5, [0055]). All of the above components are in the amount within claimed range.

The number-average molecular weight of the straight-chain polyester (A) having (meth)acryloyl groups at both ends of molecules is preferably from 1500 to 3000 (page 2, [0026]) which is within claimed range.

Therefore, all the limitations of instant claims 1 and 5 are expressly met by Ueno.

With regard to the limitations of claim 2, Ueno discloses that a mixing weight ratio [(A+C):B] of the polymer component (A+C) of the straight-chain polyester (A) having a (meth)acryloyl group at both ends of molecules and the air-drying unsaturated polymer used in the present invention to the ethylenically unsaturated monomer (B) is preferably from **20-80%:80-20%** by weight (page 3, [0036]) which is within claimed range.

With regard to the limitations of claims 3 and 4, Ueno discloses that the polymerizable polyester resin composition is used in applications such as patty, sealing material, coating material, waterproof material, **molding material**, coating material, patty, sealing material, lining material, **waterproof material**, road marking material, and paving material (page 4, [0049]-[0052]).

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

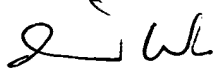
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bernshteyn whose telephone number is 571-272-2411. The examiner can normally be reached on M-F 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Bernshteyn
Patent Examiner
Art Unit 1713

MB
04/12/2006


DAVID W. WU
SUPERVISORY PATENT EXAMINER
ELECTRONIC BUSINESS CENTER 1700